

Short Communication

Isolation and characterization of eight polymorphic microsatellite loci for the coconut pest, *Brontispa longissima* (Coleoptera: Hispidae)

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Genet. Mol. Res. 10 (1): 429-432 (2011) Received October 4, 2010 Accepted January 10, 2011 Published March 15, 2011 DOI 10.4238/vol10-1gmr1008

ABSTRACT. Brontispa longissima is one of the most serious insect pests of coconut in Southeast Asia; it was first discovered on Hainan Island in June 2002. Despite the economic risk associated with this pest, genetic aspects of the invasion process have remained relatively unexplored. Using microsatellite markers, we investigated the population structure, genetic variability and pattern of invasion in various geographic populations. The methodology was based on a modified biotin-capture method. Eight polymorphic microsatellite loci were isolated and characterized for the pest. The allele number per locus varied from 2 to 3 (N = 30). The expected and observed heterozygosities of the eight loci ranged from 0.042 to 0.509 and from 0.042 to 0.963, respectively. Although the frequency of polymorphisms was not very high in this population, the microsatellite loci that were isolated will be useful for investigating the genetic

Genetics and Molecular Research 10 (1): 429-432 (2011)

diversity and migration routes of *B. longissima* populations.

Key words: Beetle; *Brontispa longissima*; Microsatellite markers; Polymorphism

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